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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/009,939	02/28/2002	Serge Bellet	U 013762-9	3019

140 7590 07/27/2005

LADAS & PARRY
26 WEST 61ST STREET
NEW YORK, NY 10023

EXAMINER

BHAT, NINA NMN

ART UNIT PAPER NUMBER

1764

DATE MAILED: 07/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/009,939	BELLET ET AL.	
	Examiner	Art Unit	
	N. Bhat	1764	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 May 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 February 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Applicant's amendment to the claims obviates the objection to the Specification, the objection taken under 37 CFR 1.75 (c) and the objection to the linking terms used in claims 2-5 and 7. Applicant's arguments regarding the rejection over Klaus have been fully and carefully considered and found not be persuasive for reasons of record detailed in the office action of March 9, 2005 and the following:

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

4. Claims 1-4 and 15-19 and 21 remain rejected and claims 5-14, 20 and 22-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Klaus for reasons of record in the office action March 9, 2005 and the following.

Applicant has argued that the examiner has not made a prima facie case of obviousness using the Klaus reference, the examiner respectfully disagrees, Klaus teaches a process and describes an apparatus for operating a steam cracking hydrocarbon plant. The intent of the invention is to provide a process of reducing operating costs associated with steam cracking by using heated wasted gas generated from the process, which is introduced into a gas turbine wherein an electric generates,

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is powered by the gas turbine. Klaus teaches that the waste gas of a gas turbine is admixed with air, and the gas mixture is passed to the cracking furnace for fuel combustion whereby the gas turbine drives and electric generator thus improving the efficiency of the steam hydrocracking process. It is maintained that Klaus teaches using the energy resulting from steam hydrocarbon cracking which is used for co-generating energy to reduce the overall consumption of energy in the steam hydrocarbon cracking process thus not only addressing applicant's concerns provides a process to accomplish the reduction in overall energy consumption. Admittedly, Klaus does not teach the electric heat apparatus or induction no specifically the points of co-generated energy to be used in the process and apparatus as claimed by applicant. The examiner respectfully disagrees with applicant on a number of points. The first point, being that applicant has drafted both the method claims and apparatus claims using Jepson language as well as comprising language. Applicant has implicitly admitted that everything with respect to the process and apparatus except that "...the source of energy needed for heating the mixture is essentially by co generating using combustion not a fuel to produce simultaneous both heat energy and mechanical work into electricity". Secondly, the comprising language opens the claim up to the elimination of a step plus function or inclusion of step plus function. In Klaus the waste gas heat from steam cracking is used to co-generate electricity which is used in other areas of the plant or hydrocarbon steam cracking. The concept of generating energy to be used in other areas of the plant, has been taught and to reduce the overall energy consumption and optimize the overall efficiency of the steam hydrocarbon cracking process. To use

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the energy generated specifically for preheating would have been obvious to one having ordinary skill in the art especially to chemical design engineers who have to routinely do heat, mass, and energy balances for the construction, design and operation of a steam hydrocarbon cracking plant. It is maintained that to a chemical engineer or design engineer familiar with heat and mass and energy balances to use streams to co-generate energy and or use exiting heated stream from a combustion process which is then heat exchanged with a cold stream is well within the purview of the ordinary artisan familiar with plant design and applicant's process and apparatus as a whole has been taught and suggested by Klaus.

5. With respect to applicant's argument that Klaus does not teach a co generating apparatus, the examiner takes exception with applicant's characterization of Klaus, the reference specifically teaches using a waste stream which is introduced into a turbine, the turbine being connected to an electrical generating machine which generates energy to be used in the plant.

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to N. Bhat whose telephone number is 571-272-1397. The examiner can normally be reached on Monday-Friday, 9:30AM-6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on 571-272-1444. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



N. Bhat
Primary Examiner
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